Software Version Description for

Electronic Commerce Processing Node

Update 2.2.0.1

June 1999

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Software Version Description for ECPN

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1.0 Scope

This Software Version Description (SVD) applies to Update 2.2.0.1 of Electronic Commerce Processing Node (ECPN). This document follows the standards set forth in *Military Standard Software Development and Documentation* (MIL-STD-498) and in the *Data Item Description (DID) for a Software Version Description* (DI-IPSC-81442), as tailored by Inter-National Research Institute (INRI).

1.1 Identification

ECPN is a Computer Software Configuration Item (CSCI) of the system identified as Electronic Commerce/Electronic Data Interchange (EC/EDI).

1.2 System Overview

ECPN is being developed by INRI for the Defense Information Systems Agency (DISA). The role of ECPN is to serve as a single interface between the Government and its commercial trading partners for conducting EC/EDI. ECPN must ensure interoperability, economies of scale, and compliance to standards set forth by the Department of Defense (DoD) and Federal Program Office (PO).

The functional objectives of ECPN are to:

- Provide rigorous end-to-end accountability within the ECPN system, with no single point of failure that could result in loss or nondelivery of data
- Implement a Relational Database Management System (RDBMS) for storage of data passing through the ECPN
- Provide automated archive and retrieval mechanisms for messages and system configuration data
- Provide system performance information, including transaction statistics and communications status

1.3 Document Overview

The purpose of this document is to identify and describe the changes made to the ECPN CSCI in Update 2.2.0.1. (For descriptions of these changes, see Section 3.3.) This SVD also identifies any software problems that were corrected by the changes made in Update 2.2.0.1.

This document contains the following sections:

Scope

States the purpose of the EC/EDI system, describes the role of ECPN within EC/EDI, and states the purpose of this SVD. (Section 1.0)

Referenced Documents

Lists the documents applicable to this SVD. (Section 2.0)

Version Description

Lists the following items: changes made to ECPN for Update 2.2.0.1, materials that compose this release of software, possible problems and known errors with ECPN Update 2.2.0.1. (Section 3.0)

Notes

Defines the acronyms and abbreviations used in this SVD. (Section 4.0)

2.0 Referenced Documents

The following documents are referenced in this SVD. In the event of a later version of a referenced document being issued, the later version shall supersede the referenced version.

- *Data Item Description – Software Version Description* (DI-IPSC-81442), December 1994.
- *Military Standard – Software Development and Documentation* (MIL-STD-498), December 1994.

3.0 Version Description

The following subsections describe ECPN Update 2.2.0.1.

3.1 Inventory of Materials Released

The following physical media and associated documentation compose ECPN Update 2.2.0.1.

Software

- Electronic Commerce Processing Node, 2.2.0.1 Update Tape.

Documentation

- *Software Version Description for Electronic Commerce Processing Node Update 2.2.0.1*, June 1999.

3.2 Inventory of Software Contents

This section has been tailored out.

3.3 Changes Installed

The following section describes the software fixes and enhancements that were integrated in ECPN Update 2.2.0.1. This information is grouped according to the following categories:

- Audit/Logging
- Communications
- Databases
- Miscellaneous
- Security

Audit/Logging

1. *Problem:* Some of the columns in the Out Channel Log Viewer are not visible unless the window is resized.

   Solution: Modified the Out Channel Log Viewer so that all columns are visible when the window is opened.

2. *Problem:* The session logs do not update until the Pause and Resume menu options are selected.

   Solution: Modified the session logs to update automatically when started.

3. *Problem:* The incoming and outgoing channel logs do not indicate when a search is in progress.

   Solution: Modified the incoming and outgoing channel logs to display a watch cursor during a search.

Communications

1. *Problem:* The logging directory is not created for CLEO® channels.

   Solution: Modified Serial Comms so that the logging directory is automatically created for CLEO channels.

2. *Problem:* The Outgoing Email Queues window cannot handle domain names that are longer than the width of the DOMAIN column.

   Solution: Removed the length restriction on domain names.

3. *Problem:* Message mis-routing and Serial Comms auditing problems occur when one channel has a name that is a substring of another channel's name.

   Solution: Modified the string look-up routines to handle substrings properly. Both Routing and Serial Comms use these routines.

4. *Problem:* The Communications Status window does not display the total number of backlogged messages.

   Solution: Added the total number of backlogged messages to the status bar at the bottom of the Communications Status window.

5. *Problem:* Communication sessions frequently attempt to use Kermit devices for CLEO sessions and CLEO devices for Kermit sessions.

   Solution: In the ECPN 2.1 architecture, a single communication process executed a single protocol (e.g., Kermit, CLEO, ZMODEM) for a single active channel. In the ECPN 2.2 architecture, a single communication process handles multiple protocols for multiple active channels. In the case of Kermit/ZMODEM and CLEO, the device tables were not being properly cleaned up when switching protocols. The code has been modified to properly clean up the device tables.

Databases

Problem: The trading partner database does not display a watch cursor until after a refresh completes.

Solution: Modified the trading partner database graphical user interface (GUI) to display a watch cursor during refresh operations.

Miscellaneous

1. *Problem:* The users are unable to paste text into some text-input fields.

   Solution: Modified the Xresource files to allow pasting into text-input fields.

2. *Problem:* The Change Machine ID and Edit Local Hosts options under the Network menu (SA Default role) do not open when a machine entry in the `/etc/hosts` file is more than 32 characters.

   Solution: Modified the edit hosts module to allow longer machine names.

Security

Problem: The enable_security script, which was written to automate some WESTHEM security requirements, does not specify the full path for the cpmod tool that it uses.

Solution: Modified the enable_security script to specify the location of the cpmod tool.

3.4 Adaptation Data

The ECPN CSCI is the same for all sites. Adaptation of ECPN software is completely driven by configuration files. All adaptation data is stored in files that are read by ECPN when configuring the system for a site. These configuration files are resident on the tape used in the initial installation process.

3.5 Related Documents

In addition to the documents released with ECPN Update 2.2.0.1 (listed in Section 3.1), the following documents are pertinent to the ECPN CSCI. In the event of a later version of a document being issued, the later version shall supersede the referenced version.

- *Security Manager's Guide for Electronic Commerce Processing Node, Version 2.2*, June 1999.
- *Software Design Description for Electronic Commerce Processing Node, Version 2.2*, INRI, June 1999.
- *Software Requirements Specification for Electronic Commerce Processing Node, Version 2.2*, INRI, April 1999.
- *Software Test Plan for Electronic Commerce Processing Node, Version 2.2*, INRI, April 1999.
- *Software User's Guide for Electronic Commerce Processing Node, Version 2.2*, June 1999.
- *System Administrator's Guide for Electronic Commerce Processing Node, Version 2.2*, June 1999.

3.6 Installation Instructions

Follow the instructions below to install ECPN Update 2.2.0.1

1. **Important:** This software will not install correctly if ECPN processes that will be replaced are running during the installation. To stop ECPN processes, select Stop ECPN Software from the SA Default role's Software menu.

2. Log in to the UNIX® system as `root`.

3. Determine if any of the ECPN boot processes (MenuExec, AlertDaemon, AdmMgr, AlertNotifier, and COEExecMgr) are running by entering the following commands and pressing [Enter] after each command:

   ```
   #  ps -ef | grep MenuExec
   #  ps -ef | grep AlertDaemon
   #  ps -ef | grep AdmMgr
   #  ps -ef | grep AlertNotifier
   #  ps -ef | grep COEExecMgr
   ```

   If any of these processes are running, the system returns the process identification number (PID). Enter the following command to kill each process:

   # `kill` <MenuExec PID> <AlertDaemon PID> <AdmMgr PID> <AlertNotifier PID> <COEExecMgr PID>

   (Note: Enter the process identification number of the processes, without the angle braces.)

4. To prevent any FTP sessions from starting during the installation, the FTP daemon must be disabled as follows:

   a. In the /etc/inetd.conf file, insert a # symbol at the beginning of the following line:

      ```
      ftp stream tcp nowait root /h/EC/progs/ftpd
      ```

   b. At the command prompt, enter the following command and press [Enter]:

      ```
      #   inetd -c
      ```

5. To determine if any FTP daemon processes are currently running, enter the following command:

   ```
   #  ps -ef | grep ftpd
   ```

   If any of these processes are running, the system returns the PID. Enter the following command to kill each process:

   ```
   #  kill <PID>
   ```

   (Note: Enter the process identification number of the process, without the angle braces.)

6. Insert the tape into the tape drive. Extract the 2.2.0.1 update to a temporary directory by entering the following commands and pressing [Enter] after each command:

   ```
   #  mkdir /h/2.2.0.1

   #  cd /h/2.2.0.1

   #  tar xvf <tape drive>
   ```

   (Note: <tape drive> specifies the drive containing the 2.2.0.1 Update Tape. Enter the name of the drive, without the angle braces.)

7. To run the PostInstall application (which installs the new software), enter the following commands in order, pressing [Enter] after each command:

   ```
   #  chmod +x ./PostInstall

   #  ./PostInstall
   ```

   When the PostInstall application finishes, the 2.2.0.1 update software is installed.

8. Enable the FTP daemon as follows:

   In the /etc/inetd.conf file, remove the # symbol (that you inserted in *Step 4*) at the beginning of the following line:

   ```
   #  ftp stream tcp nowait root /h/EC/progs/ftpd
   ```

   When the system is rebooted in *Step 9*, the FTP service will be re-enabled.

9. To restart the boot processes, reboot the machine.

10. Login as `ecpn`, and restart the ECPN software.

> **NOTE:** This SVD and the software media should be stored in a safe location in case it is necessary to reload the ECPN software.

3.7 Possible Problems and Known Errors

1. *Problem:* Acknowledging alerts in the Non-Urgent Alert window or opening the Alert Display Filter window can occasionally cause the alert GUIs to deadlock.

   Work-around: Exit the Non-Urgent Alert window or the Alert Display Filter window. If the system is not restored to normal, open a terminal window and kill the AlertNonInterrupt process.

2. *Problem:* Acknowledging all red alerts from the Non-Urgent Alert window may result in the ECPN GUIs locking up.

   Work-around: None.

3. *Problem:* The AlertDaemon sometimes stops processing alerts.

   Work-around: Use the check_alerts program to find out if the AlertDaemon has stopped. If the program determines that AlertDaemon has stopped processing, the program suggests a system reboot.

4. *Problem:* For some SAACONS X12 to UDF messages that fail translation, the 997 acknowledgment messages state that they pass.

   Work-around: None.

4.0 Notes

The following acronyms and abbreviations appear in this document:

COE: Common Operating Environment

CSCI: Computer Software Configuration Item

DID: Data Item Description

DISA: Defense Information Systems Agency

DoD: Department of Defense

EC/EDI: Electronic Commerce/Electronic Data Interchange

ECPN: Electronic Commerce Processing Node

FTP: File Transfer Protocol

GUI: Graphical User Interface

INRI: Inter-National Research Institute

PO: Program Office

RDBMS: Relational Database Management System

SAACONS: Standard Army Accounting and Contracting System

SVD: Software Version Description

UDF: User Defined File

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